Allowance Products & Processes

Presentation to

Maritime Allowance Working Group

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Agenda

- SMART Allowance Computation History File (ACHF)
  - Implementation Status
  - Reconciliation
- System Allowance Technique (SAT)
  - Objectives
  - Troubled System Identification
  - Allowancing
  - Budget & Execution
  - Prototype…Single Ship of Class
  - POA&M
- OPN-8 Reengineering

SMART Allowance Computation History File (ACHF)

SMART ACHF Implementation Status

- What is SMART Allowance Computation History File?
  - NAVICP Historical Audit Trail of Authorized Allowances
    - Provides Authorized AQ by UIC/NIIN or NIIN/UIC
    - Identifies Allowance Source (e.g. ASI #, CILS TAT, etc.)
    - Mimics SNAP Last Application Deletion Based on CDMD-OA Data Feed
- LANT Fleet Demo Conducted 23-24 Sep 2002
- PAC Fleet Demo Conducted 30-31 Oct 2002
- Initial Release Projected for April 2003

SMART ACHF Reconciliation

- ➲ Purpose: Establish Authorized Allowance Baseline
- ➲ Process…Assessing Scope :
  - ◼ 2-ship per Class Sampling (LANT/PAC)
  - ◼ Acquire Ship's Authorized Allowances via FIMARS
  - ◼ Compare SMART ACHF Allowance to Ship's Allowance
  - ◼ Determine Deltas between SMART ACHF & Ship's Allowance
- ➲ Expectation: Afloat OPN Shortages

Designing SMART ACHF Reconciliation Logic

SMART ACHF

➲ Take Away…

  ◻ On Track for an April SMART ACHF Implementation

  ◻ Assessing Ship to Shore Allowance Delta in Progress

  ◻ Designing SMART ACHF Functionality to Automate a Full Fleet Reconciliation… Authorized Allowance Baseline Essential to OPN-8 Reengineering Efforts

System Allowance Technique (SAT)

SAT Objectives

⮑ System Oriented <u>Maintenance</u> Allowancing Technique vice Platform Re-COSAL using CILS-TAT

⮑ Readiness Based Allowancing
- CASREP Supply Downtime...Ao Proxy for Non-RBS Systems
- Established Link between OPN-8 $ and Readiness

⮑ Synchronize Budget Development & Execution
- Stabilize & Standardize Allowances

Emulates RBS...Standardizes Allowances... Targets Troubled Systems

SAT Troubled System Identification

- Use CASREP Supply Downtime as System Readiness Indicator... Critical Deferred Maintenance
- Identify Systems within Ship Classes
  - Significant Supply Downtime
  - Non-RBS
  - Systems with C3/C4 CASREPs & Class-wide Application
- Ship's Material Condition Metrics (SMCM) Web Site
  - Rank Systems by Ship Class
- Perform Technical Analysis for Resolution
  - Identify Re-Allowancing Candidates
  - Identify Systems for ISEA Referral

Defendable...Linked to Readiness Metric

SAT Allowancing

- Apply 3-M & CASREP <u>Addback</u> Rules to <u>All</u> Troubled System <u>Candidate</u> NIINs
- Highest MRU is Selected for Common NIINs Across Systems
- Load Non-Standard Allowance File (NSAF)…same as <u>RBS</u>
- Perform <u>SAT</u> Analysis & Allowancing <u>Annually</u>…via ASI
- <u>Other</u> <u>Maintenance</u> Allowances (ACIP, Reprovisioning Gatekeeper, Safety, PMS, FP/AT) Provided <u>Monthly</u>…via ASI
- <u>All</u> Tech Data Flows <u>Monthly</u>…via ASI…status quo

Perform SAT Maintenance Allowancing Annually… Replacement for CILS TAT

MAWG Concurred

SAT Budget & Execution

➲ "Leap Frog" BAM Requirement & Execution Approach

- ◻ Year 1: Identify SAT BAM Budget Requirements for Year 3
- ◻ Year 2: Perform SAT Analysis to Refine & Lock Allowances ("Buy-In") for Execution ("Buy-out") in Year 3
- ◻ Year 2 Allowances also Serve as BAM Budget Requirements for Year 4

Refining Requirement Closer to Execution

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SAT Budget & Execution

Year 1   Year 2   Year 3   Year 4   Year 5
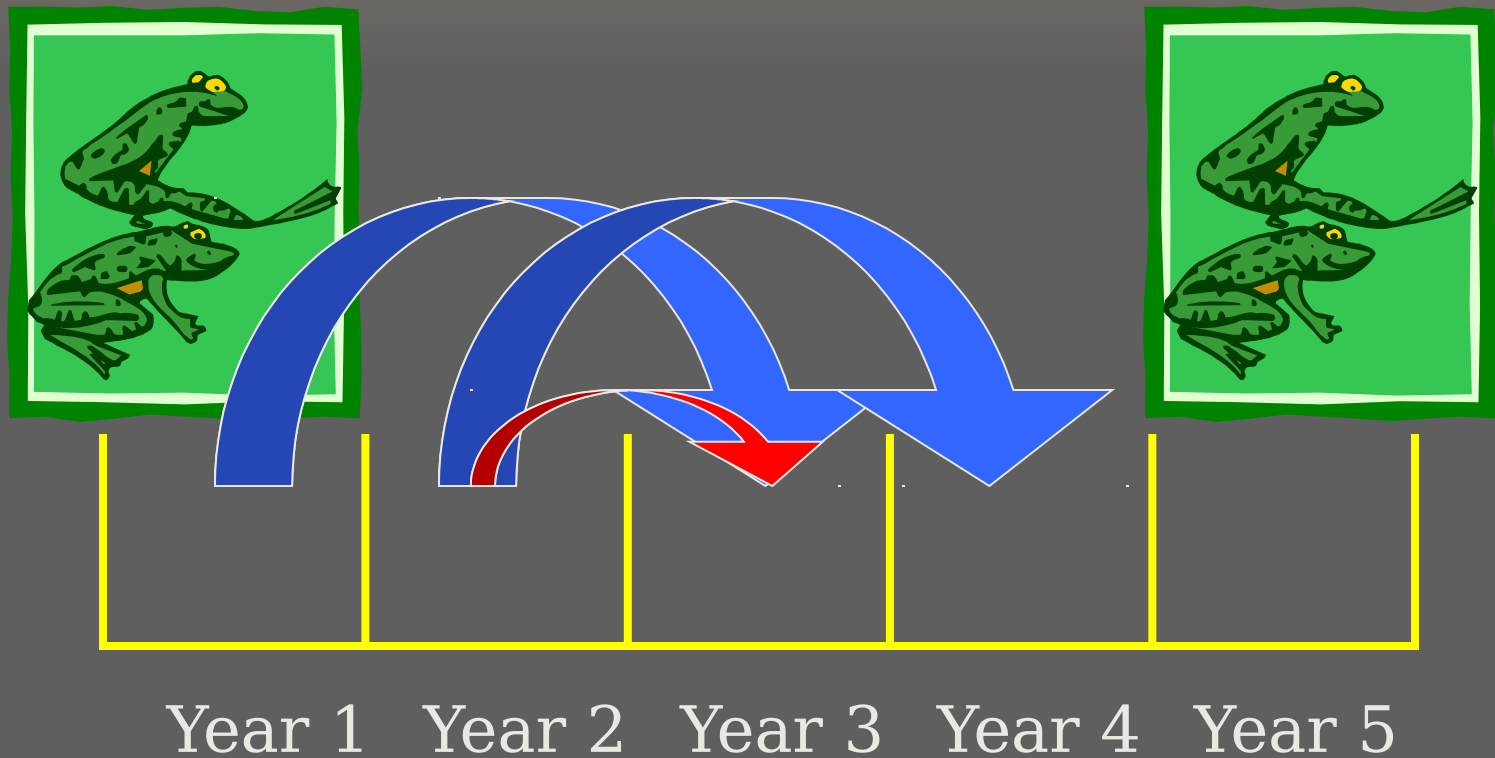
Budget Requirement

Refined
Requirements for

SAP Prototype…Single Ship of Class

➲ Top 5/6 Troubled Systems Selected per Class

Ship Type	EIC	EIC NOMENCLATURE
CG	3108000	GENERATOR SET, 60HZ, GAS TURBINE DRIVEN
CG	T10H000	RECOVERY SYSTEM, WASTE HEAT (COMBUSTION ENGINEERING BOILER)
CG	GC13000	MOUNT, GUN, 5 IN. 54 CAL. RF, MK 45 MOD 1
CG	D701000	SERVICE SYSTEM, FUEL OIL
CG	TF01000	AIR SYSTEMS, HIGH PRESSURE
CG	D111000	GENERATOR ASSEMBLY, GAS
CV	5ZE4000	FIRE CONTROL SYSTEM, GUIDED MISSILE, MK 91 MOD 3
CV	FD07000	PIPING AND ACCESSORIES, MAIN LUBE OIL SERVICE
CV	N872000	AN/SLQ-32(V)4, COUNTERMEASURE SET
CV	QP00000	COMMUNICATION SYSTEMS, SATELLITE
CV	HM10000	AN/USQ-119(V)1-22, COMMAND SYSTEMS, TACTICAL
SSN	TG01000	PLANT, OXYGEN GENERATING, ELECTROLYTIC
SSN	TK01000	DISTILLING PLANT, LOW PRESSURE SUBMERGED TUBE/BASKET
SSN	LE0G000	PERISCOPE TYPE 18B
SSN	TF03000	AIR SYSTEMS, LOW AND MEDIUM PRESSURE
SSN	TV01000	HYDRAULIC SYSTEM, MAIN-VITAL AND SHIP SERVICE

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SAT Prototype…Single Ship of Class

⮑ Sample Results: 60 HZ Gas Turbine Generator (3108000)

- ◻ Supply Related CASREP Delay Time: <u>1090</u> Days
  - CASREPs w/Supply Delay Time: **83 CASREPs**
  - Unique CASREP NIINs: **<u>167</u> NIINs**

  Pre-SAT Raw Data

- ◻ Supply Related CASREP Delay Time: <u>597</u> Days
  - CASREPs w/Supply Delay Time: **54 CASREPs**
  - Unique CASREP NIIN <u>Allowance</u> <u>Candidates</u>: **75 NIINs**

  Pre-SAT Revised Data

- ◻ Supply Related CASREP Delay Time Reduction: <u>171</u> Days (29%)
  - Unique CASREP NIINs Avoided: **<u>15</u> NIINs (20%)**
  - CASREPs w/Supply Delay Time Avoided: **<u>7</u> CASREPs (13%)**
- ◻ Cost to Allowance 26 Ships in CG Class: <u>$238K</u>

  After SAT Addbacks

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SAT Prototype…Single Ship of Class

- ➲ Results Confirm <u>Technical</u> <u>Issues</u> Play a Major Role in Support Deficiencies
  - ■ Solution…Technical Referrals Required Prior to Allowancing
- ➲ Re-allowancing w/Addbacks Decreases Supply CASREP Delay Time
  - ■ Avg Readiness Improvement of 16% <u>Reduction</u> in CASREP Supply Delay Time @ $4.7 Million
    - – 9 Systems where Greatest # of CASREP Parts are Allowance Candidates
- ➲ More Complete Results will be Determined from a Total <u>Ship-Class</u> <u>Prototype</u>

Need MAWG Concurrence

Readiness Improved…Proceed with Class-Wide

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SAT POA&M

- **Present to MAWG for Approval of Concept**
- **Prototype all ships in 3 Classes(CG/CV/SSN)**
  - Present Results to MAWG for Approval
- Run Process for All Ships In All Classes
- Present Results to MAWG for Approval
- Develop Budget/Submit to BAM 06 Based on Prototype
- Execute SAT in Lieu of TAT (Manual Process)
- Program Final SAT Process (Start in August 2003)

- 03-04-03
- 04-30-03

- 07-31-03
- 08-31-03
- 09-24-03
- FY04
- TBD

Budget and Execution Plan

Need MAWG Concurren

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OPN-8 Re-engineering

OPN-8 Re-engineering

- Overall Objectives and Goals
  - Link Requirements to Weapon System Budget Lines
  - Enhanced Front-end QA Validations
  - Generate Requisitions Ashore Based on Authorized & Budgeted Allowances
    - Reduce Workload Afloat
    - Expedite Parts Support (point of Allowance to Material Delivery)
- Employing a Phased Approach
  - ORCAS Implementation
  - R-Supply Revision
  - Accurate & Timely Asset Position Reporting

Need MAWG Assistance

OPN-8 Re-engineering: Phase I

- ASI Periodicity....Once per Month
  - Modernization & Critical Maintenance
  - True Adds & Increases Only
  - Complete Configuration (EQU) & APL (COS) Updates Continuously Provided
- Smart ACHF.... Master Allowance File
  - Reconciliation Required to Establish Common Baseline
    - Facilitated by Standard Business Rules
    - Cost...Potential Funding Requirement
- Improve/Enhance Data Validations
  - Front-end QA Processes (NIIN filter/QSCANR/ HIVAL /Provisioning)
- Manage/Execute Allowances by Weapon System
  - Ledger Accounts
    - Running Checkbook
    - Use LRC – Match Funding Line to WS & Platform

OPN-8 Re-engineering: Phase II

➲ Project Requisitions & Cancel Unmatched
  ◻ Load ORCAS with ASI Allowance Adds & Increases
    – Concurrent w/ ASI Release
  ◻ Match Incoming Requisition to Add/Increase File
    – Projected Outfitting Requisition
  ◻ Automatic Cancellation of Mismatches
    – Manual Review on an Exception Basis
➲ System Allowance Technique (SAT) Replaces Re-COSAL
  ◻ Focused Re-allowancing with Measurable Readiness Payback
  ◻ Performed Annually

OPN-8 Re-engineering: Phase III

➲ Requisitions Generated Ashore Concurrent with Allowances

- ◻ FIMARS
  - – Ship Asset Posture
- ◻ R-Supply Modifications
  - – Record Allowance Adds/Increases & Stock Dues

Need MAWG Assistance and Approval

Back up Slides

System Allowance Technique (SAT)

➲ Sample of Systems Selected

Ship Type	EIC	EIC NOMENCLATURE	SUPPLY DELAY DAYS	SHIPS	# CASREPs w/ SDT	C3/C4 COUNT
CG	3108000	GENERATOR SET, 60HZ, GAS TURBINE DRIVEN	1090	26	83	45
CG	T10H000	RECOVERY SYSTEM, WASTE HEAT (COMBUSTION ENGINEERING BOILER)	994	21	27	6
CG	GC13000	MOUNT, GUN, 5 IN. 54 CAL. RF, MK 45 MOD 1	888	19	46	3
CG	D701000	SERVICE SYSTEM, FUEL OIL	887	22	27	1
CG	TF01000	AIR SYSTEMS, HIGH PRESSURE	878	21	46	3
CG	D111000	GENERATOR ASSEMBLY, GAS	620	22	44	2
CV	5ZE4000	FIRE CONTROL SYSTEM, GUIDED MISSILE, MK 91 MOD 3	1071	10	72	1
CV	FD07000	PIPING AND ACCESSORIES, MAIN LUBE OIL SERVICE	210	8	14	2
CV	N872000	AN/SLQ-32(V)4, COUNTERMEASURE SET	177	10	20	1
CV	QP00000	COMMUNICATION SYSTEMS, SATELLITE	153	10	12	2
CV	HM10000	AN/USQ-119(V)1-22, COMMAND SYSTEMS, TACTICAL	102	10	11	2
SSN	TG01000	PLANT, OXYGEN GENERATING, ELECTROLYTIC	1200	40	61	1
SSN	TK01000	DISTILLING PLANT, LOW PRESSURE SUBMERGED TUBE/BASKET	1084	37	35	2
SSN	LE0G000	PERISCOPE TYPE 18B	973	43	55	2
SSN	TF03000	AIR SYSTEMS, LOW AND MEDIUM PRESSURE	933	30	23	3
SSN	TV01000	HYDRAULIC SYSTEM, MAIN-VITAL AND SHIP SERVICE	846	30	37	2

Number of ships Per Class

CG – (26)   CV – (12)   SSN – (53)

System Allowance Technique (SAT)

➔ Technical Issues Prevent All NIINs from being an Allowance Candidate...Provisioning, Engineering Decisions, SM&R Coding, etc.

Ship Group	EIC	# CASREP NIINs	# NIIN Candidates	# NIIN Non-Candidates	% Non Candidates	# Unique NIINs	# Uniq. NIIN Candidates	# Uniq. NIIN Non-Candidates	% Uniq. Non Candidates
CG 47 CL	3108000	246	102	144	58.5%	167	75	92	55.1%
	T10H000	40	18	22	55.0%	32	16	16	50.0%
	GC13000	124	93	31	25.0%	99	75	24	24.2%
	D701000	41	8	33	80.5%	33	8	25	75.8%
	TF01000	229	162	67	29.3%	148	95	53	35.8%
	D111000	241	29	212	88.0%	49	18	31	63.3%
Carriers	5ZE4000	184	95	89	48.4%	88	38	50	56.8%
	FD07000	30	17	13	43.3%	26	14	12	46.2%
	N872000	69	54	15	21.7%	29	19	10	34.5%
	QP00000	24	1	23	95.8%	19	1	18	94.7%
	HM10000	16	2	14	87.5%	10	1	9	90.0%
SSNs	TG01000	271	163	108	39.9%	105	64	41	39.0%
	TK01000	95	35	60	63.2%	75	24	51	68.0%
	LE0G000	87	20	67	77.0%	52	10	42	80.8%
	TF03000	47	25	22	46.8%	41	23	18	43.9%
	TV01000	55	6	49	89.1%	48	4	44	91.7%

System Allowance Technique (SAT)

➲ Re-calculated SDT for Candidate NIINs

Ship Type	EIC	SUPPLY DELAY DAYS	# CASREPs w/ SDT	Supply Delay Days Reduced	% Supply Delay Improvement	# CASREP NIINs Avoided	CASREP Avoidance	Total TOB Cost	ROI - Cost/Days Reduced
CG	3108000	597	54	171	28.6%	15	7	$237,907.02	$ 1,391.27
CG	T10H000	114	12	14	12.3%	3	2	$183,266.20	$13,090.44
CG	GC13000	545	37	37	6.8%	5	2	$121,300.40	$ 3,278.39
CG	D701000	86	8	29	33.7%	2	2	$525,627.96	$18,125.10
CG	TF01000	403	25	25	6.2%	44	3	$258,673.48	$10,346.94
CG	D111000	156	14	0	0.0%	2	0	$65,924.30	$ -
CV	5ZE4000	688	55	136	19.8%	21	4	$26,778.24	$ 196.90
CV	FD07000	98	6	43	43.9%	5	4	$444,880.44	$10,346.06
CV	N872000	136	15	6	4.4%	2	1	$173,962.44	$28,993.74
CV	QP00000	9	1	9	100.0%	1	1	$0.00	$ -
CV	HM10000	16	2	16	100.0%	2	2	$241,608.84	$15,100.55
SSN	TG01000	917	46	169	18.4%	36	8	$2,271,455.45	$13,440.56
SSN	TK01000	627	23	149	23.8%	5	4	$470,191.09	$ 3,155.64
SSN	LE0G000	496	19	131	26.4%	4	4	$0.00	$ -
SSN	TF03000	453	13	30	6.6%	10	2	$973,424.50	$32,447.48
SSN	TV01000	79	5	35	44.3%	4	3	$283,569.61	$ 8,101.99

Ships allowancing packages used: CG 59, CVN 72, SSN 720

System Allowance Technique (SAT)

⮑ Impact of Re-allowancing…Reduction in SDT (includes non-candidate NIINs)

Ship Type	EIC	SUPPLY DELAY DAYS	# CASREPs w/ SDT	Supply Delay Days Reduced	% Supply Delay Improvement	# CASREP NIINs Avoided	CASREP Avoidance	Total TOB Cost	ROI - Cost/Days Reduced
CG	3108000	1090	83	69	6.3%	15	6	$237,907.02	$ 3,447.93
CG	T10H000	994	27	12	1.2%	3	2	$183,266.20	$ 15,272.18
CG	GC13000	888	46	37	4.2%	5	2	$121,300.40	$ 3,278.39
CG	D701000	887	27	18	2.0%	2	1	$525,627.96	$29,201.55
CG	TF01000	878	46	22	2.5%	44	2	$258,673.48	$11,757.89
CG	D111000	620	44	0	0.0%	2	0	$65,924.30	$ -
CV	5ZE4000	1071	72	81	7.6%	21	2	$26,778.24	$ 330.60
CV	FD07000	210	14	43	20.5%	5	4	$444,880.44	$10,346.06
CV	N872000	177	20	0	0.0%	2	0	$173,962.44	$ -
CV	QP00000	153	12	0	0.0%	1	0	$0.00	$ -
CV	HM10000	102	11	16	15.7%	2	2	$241,608.84	$15,100.55
SSN	TG01000	1200	61	169	14.1%	36	8	$2,271,455.45	$13,440.56
SSN	TK01000	1084	35	149	13.7%	5	4	$470,191.09	$ 3,155.64
SSN	LE0G000	973	55	115	11.8%	4	3	$0.00	$ -
SSN	TF03000	933	23	10	1.1%	10	1	$973,424.50	$97,342.45
SSN	TV01000	846	37	28	3.3%	4	2	$283,569.61	$10,127.49

Allowance Products & Processes

- ➲ **Re-engineered Maritime Allowance Development (ReMAD)**
  - ■ Moving from UICP to the Allowance Process of the Future
    - – Phase I Smart Allowance Computation History File (ACHF)
      - ◆ Master Allowance File (MAF)
      - ◆ Historical Repository of Allowances
    - – Phase II Redesigned Allowance Process
      - ◆ Utilize external master sources ….CDMD-OA, OARS, etc.
      - ◆ Standard Allowance File…support Maritime Allowance Improvement
      - ◆ Streamline and increases the Flexibility of the UICP/Unique process
      - ◆ Enhanced Analytical ("what If") Capability
      - ◆ Disciplined/Control Allowancing at Ship, System, and NIIN level
    - – Web Enabled…Associative Database…R&D Funding
    - – Platform for ASI Process Improvement
    - – Platform for COSAL/SNAP Ashore